

REMARKS

This Amendment amends the claims so that the numbered layers in the process claims and the product claims now correspond to each other. In addition, independent claims 1, 9 and 16 are amended to recite that the fourth semiconductor layer is on the second semiconductor layer. Claim 9 and claim 5 are amended to recite two different metals for forming contacts on the respective third and fourth layers. The first and second metals are further defined in claims 7 and 13 as aluminum and nickel, respectively.

The Morris reference does not show a third layer on a second layer where both are the same polarity and the third is more highly doped than the second. Instead Morris has an epitaxial layer 224 on the layer 206. The epitaxial layer 224 is grown from the underlying layer 206 and thus cannot have a greater doping concentration than layer 206. Moreover, Morris expressly adds another layer 226 that is highly doped. Thus, Morris has more layers than required by the invention. The invention reduces the number of layers and the steps for forming the layers and thus is patentable over Morris.

The Sakai reference does not show patterning a third layer to provide openings and forming a fourth layer inside the openings. Instead Sakai in Fig. 3(b) removes most of the third layer to leave a stack structure. While there is an opening in Sakai layer 14, that layer does not appear to be one of the active layers of the transistor.

Regarding product claims 9 and 16, Sakai does not show a fourth compound semiconductor layer within an opening defined by the second and third layers. In Sakai the alleged fourth layer 16 is not in an opening of the third layer. In Sakai the third layer is layer 5. That layer has no openings and only a residual portion of the layer remains on the base layer 4. Layer 14 is not the same layer as layer 5. Thus, the rejection relies upon two different layer to find the same structure as the invention. The reference is thus

deficient and requires more layers than the invention to achieve a similar structure.

None of the references of record show or suggest two different metals, especially aluminum and nickel, for making ohmic contact. This is an important feature in silicon carbide devices because different metals are needed to contact the p-type and n-type materials.

Having thus distinguished the invention from the art of record, Applicants believe their application is now in condition for allowance.

Respectfully submitted,

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